(b) As a short term measure, the country may have to resort to import of edible oils to improve availability and hold price line.

(c) The estimated production of edible oil this year is 67 lakh MT as against the requirement of 75.32 lakh MT.

(d) The target fixed by the Planning Commission for 1996-97 is 230 lakh tonnes of *oilseeds* which is likely to be exceeded.

Research undertaken by the Central Institute of Fresh Water Aquaculture, Bhubaneswar

2880. SHRIMATI JAYANTI PATNAIK: Will the Minister of AGRICULTURE be pleased to state:

(a) the various research work undertaken by the Central Institute of Fresh Water Aquaculture (CIFA), Bhubaneswar, so far;

(b) the number of scientists and scholars engaged in the research work;

(c) the fund provided by Government to that Institute during the Eighth Plan and provision made for the Ninth Plan;

(d) whether Government have any proposal to expand that Institute; and

(e) if so, the steps taken in that direction?

THE MINISTER OF AGRICULTURE (SHRI CHATURANAN MISHRA): (a) The following are some of the important research work undertaken by the Central Institute of Fresh Water Aquaculture (CIFA), Bhubaneswar sc far:

i) Prolonged and multiple breeding of carps during pre-monsoon, monsoon and post monsoon seasons for seed availability throughout the year, by advanced gonadal maturation.

ii) High density seed rearing with spawn at 50 million/ha with 6592% survival and fry at 5 million/ha with 70-75% survival.

iii) Production rate of 15 tonnes/ha/yr. under intensive carp culture.

iv) Breeding, seed production and hatchery management of catfish under controlled conditions through environmental and hormonal manipulation and standardisation of hatchery designs.

v) Broodstock development and hatchery management for giant freshwater prawn and riverine prawn.

vi) Technology for culture of pearls and pearl images through implantation of nuclei in freshwater mussel.

vii) Quantification of aquatic biofertilisation with Azolla to meet total nitrogen requirements of fish production.

viii) organic farming in aquaculture using biogas slurry as manure to produce fish and spirulina.

ix) Diploid gynogenesis and polyploidy in the carps and stock improvement in rohu through genetic selection.

x) Formulation of chemical mixture, CIFAX, effective in controlling the Epizootic Ulcerative Syndrome (EUS) disease in fishes.

xi) Development of polyvalent antigen (vaccine) for controlling Aeromoans infection commonly encountered in fish ponds.

xii) Design and development of closed-loop recirculatory system and flow through system for intensive aquaculture.

xiii) Cryopreservation of milt of indian major carps and testing the viability of the cryopreserved milt.

xiv) Formulation and development of CIFACA feed for various stages of carps, catfish and prawn.

(b) The Cadre Strength of Scientists in CIFA in 78. Presently there are 23 research scholars in the Institute.

(c) The Budget of the Institute during the Eighth Plan period is:

Plan	Rs. 854.77 lakhs
NON Plan	Rs. 1071.96 lakhs

Allocations for the Ninth Plan have not been finalised as yet. However, the budget estimate of CIFA for the year 1997-98 are:

PLAN	Rs. 400.00 lakhs
Non Plan	Rs. 115.00 lakhs

(d) No, Sir.

(e) The question does not arise.

Fisheries and Agricultural Research Institutes

2881. SHRIMATI JAYANTI PATNAIK: Will the Minister of AGRICULTURE be pleased to state:

(a) the total number of Fisheries and Agricultural Research Institutes set up in the country alongwith location thereof;

(b) whether Government have a proposal to set up new Fisheries Research Institutes and Agricultural Research Centres in the Ninth Plan; and

(c) if so, the details thereof, including their locations, State-wise?

THE MINISTER OF AGRICULTURE (SHRI CHATURANAN MISHRA): (a) the total number of Research Institutes set up in the country are 8 in Fisheries and 82 in Agriculture including Animal Science. The location of these institutions is given in the enclosed statement. (*See* below)

(b) and (c) Madam, there is no proposal to establish new Fisheries Research Institutes in the Ninth Plan. However, relating to Agricultural Research Institute/Centres, it is proposed to establish a National Facility for Plant Virus Research at Pune (Maharashtra) and a National Centre for Agriculturally Important Micro Organisms at New Delhi.

Statement

DEPARTMENT OF AGRICULTURAL RESEARCH AND EDUCATION

S.No. Fisheries & Agricultural Research Institutes in Bureaux/National Research Centres (N.R.Cs)/Project Directorates (P.Ds).

I.	**FISHERIES**	**LOCATION**
1.	Central Institute of Brackishwater Aquaculture	Madras
2.	Central Inland Capture Fisheries Research Institute	Barrackpore
3.	Central Institute for Freshwater Aquaculture	Bhubaneshwar
4.	Central Institute of Fisheries Technology	Cochin
5.	Central Institute of Fisheries Education	Bombay
6.	Central Marine Fisheries Research Institute	Cochin
7.	National Bureau of Fish Genetic Resources	Lucknow
8.	N.R.C.— Cold Water Fisheries	Haldwani
II.	**AGRICULTURE INCLUDING ANIMAL SCIENCE**	
1.	Central Institute for Research on Cotton Technology	Bombay
2.	Central Agriculture Research Institute	Port Blair
3.	Central Arid Zone Research Institute	Jodhpur
4.	Central Avian Research Institute	Izatnagar
5.	Central Institute for Research on Goat	Makhdoom
6.	Central Institute for Post Harvest Engg. & Technology	Ludhiana
7.	Central Institute for Research on Buffalo	Hisar
8.	Central Institute of Horticulture for North Plains	Lucknow
9.	Central Institute of Agricultural Engineering	Bhopal
10.	Central Institute of Cotton Research	Nagpur